

## **Diode-pumped continuous Wave Tm:KLu(WO<sub>4</sub>)<sub>2</sub> and Tm:KY(WO<sub>4</sub>)<sub>2</sub> microchip lasers**

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### **Abstract**

© 2016 IEEE. Laser performance of Tm doped KLu(WO<sub>4</sub>)<sub>2</sub> and KY(WO<sub>4</sub>)<sub>2</sub> crystals was investigated in a microchip cavity configuration with fiber coupled laser diode as a pump source. The highest output power of 1013 mW with 51 % slope efficiency was obtained for Tm:KY(WO<sub>4</sub>)<sub>2</sub> crystal. Using Tm:KLu(WO<sub>4</sub>)<sub>2</sub> crystal output power of 912 mW and slope efficiency of 38 % were achieved.

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### **Keywords**

diode-pumped lasers, microchip lasers, monoclinic double tungstates, thulium lasers